

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS

1. (Currently amended) A process for the chromatographic separation of components of a multiple-component fluid mixture by means of a Simulated Moving Bed Process, comprising passing the multiple-component fluid mixture and at least one solvent into a plurality of at least one chamber or chamber sections containing a solid, at a first and second input, and

an extract flow, which contains at least one first component separated from the multiple-component fluid mixture, as well as a raffinate flow, which contains at least one second component separated from the multiple-component fluid mixture are drawn off from the chambers or chamber sections at a first and second outlet, whereby

the chambers or chamber sections forming a closed circuit are connected together in series, and connection ports of the first and second inlets and outlets arranged between two chambers or chamber sections of the circuit are repositioned between two other chambers or chamber sections of the circuit at the end of a cyclical time unit, wherein the concentration of the input multiple-component fluid mixture and/or a composition of the solvent is/are changed within the cyclical time unit, which represents the duration between two switching operations for repositioning connection ports.
2. (Previously presented) The process according to claim 1, wherein a pressure of the input multiple-component fluid mixture and/or of the solvent is changed, in steps and/or continuously, within a cyclical time unit.

3. (Previously presented) The process according to claim 1, wherein a temperature of the input multiple-component fluid mixture and/or of the solvent is changed, in steps and/or continuously, within a cyclical time unit.
4. (Previously presented) The process according to claim 1, wherein the concentration of the multiple-component fluid mixture and/or the composition of the solvent is changed, in steps and/or continuously.
5. (Previously presented) The process according to claim 1, wherein at least one solid is used which is suitable for bringing about differing migration rates of the individual components of the multiple-component fluid mixture in the individual chambers or chamber sections.
6. (Previously presented) The process according to claim 1, wherein the solid is an adsorbent material.
7. (Previously presented) The process according to claim 1, wherein a mixture of a plurality of fluids is used as solvent.
8. (Previously presented) The process according to claim 1, wherein a gas or a mixture of a plurality of gases which is/are in a supercritical or subcritical state is used as solvent and/or multiple-component fluid.
9. (Previously presented) The process according to claim 1, wherein the solvent comprises components which are to be separated.
10. (Previously presented) The process according to claim 9, wherein the solvent comprising the components which are to be separated and the solvent without the components which are to be separated display different compositions and/or capacities in terms of

influencing the bonding behaviour of the components which are to be separated in relation to the solid.

11. (Previously presented) The process according to claim 1, wherein a chemical reaction is carried out in the chambers or chamber sections in order to produce and separate the components.
12. (Previously presented) The process according to claim 1, wherein the connection ports of the first and second inlets and outlets are repositioned at different times.
13. (Previously presented) The process according to claim 1, wherein at least one volume flow of the multiple-component fluid mixture, of the solvent, of the extract flow, of the raffinate flow and internal recirculation flows is changed, in steps and/or continuously, within a cyclical time unit.
14. (Canceled)
15. (New) The process according to claim 1, wherein the concentration of the input multiple-component fluid mixture and/or a composition of the solvent is/are changed within the cyclical time unit to enhance productivity, defined as the mass of the purified multiple component fluid mixture per unit time and the solid.